

What is claimed is:

1. A sender in a multicast subscription system having a multiplicity of subscribers, the sender comprising:

5           a negative acknowledge (NACK) server; and  
          an attentiveness monitor which monitors the activity at said NACK server.

10       2. A sender according to claim 1 and also comprising a NACK incident generator which disturbs the flow of data between said sender and said subscribers.

15       3. A sender according to claim 2 and wherein said NACK incident generator alters the sent and pending queues.

          4. A sender according to claim 3 and wherein said NACK incident generator places a packet in said sent queue which was never transmitted.

20       5. A sender according to claim 3 and wherein said NACK incident generator alters the packet sequence number.

25       6. A sender according to claim 3 and wherein said NACK incident generator increments the sequence number relative to the sequence of packets that actually need to be sent.

30       7. A sender according to claim 1 and wherein said attentiveness monitor determines whether or not there are attentive subscribers from the activity at said NACK server.

8. A sender in a multicast subscription system having a multiplicity of subscribers, the sender comprising:

a negative acknowledge (NACK) server; and

a NACK incident generator which disturbs the flow of data between said sender and said subscribers.

9. A sender according to claim 8 and wherein said NACK incident generator alters the sent and pending queues.

10. A sender according to claim 8 and wherein said NACK incident generator places a packet in said sent queue which was never transmitted.

11. A sender according to claim 8 and wherein said NACK incident generator alters the packet sequence number.

12. A sender according to claim 8 and wherein said NACK incident generator increments the sequence number relative to the sequence of packets that actually need to be sent.

13. A method of sending packets to a multiplicity of subscribers in a multicast subscription system, the method comprising:

monitoring the activity at a NACK server.

14. A method according to claim 13 and wherein said monitoring includes determining whether or not there are attentive subscribers from the activity at said NACK server.

15. A method according to claim 13 and also comprising disturbing the flow of data between said sender and said subscribers.

16. A method according to claim 15 and wherein said disturbing comprises altering the sent and pending queues.

5 17. A method according to claim 15 and wherein said disturbing comprises placing a packet in said sent queue which was never transmitted.

10 18. A method according to claim 15 and wherein said disturbing comprises altering the packet sequence number.

15 19. A method according to claim 15 and wherein said disturbing comprises incrementing the sequence number relative to the sequence of packets that actually need to be sent.

20 20. A method of sending packets to a multiplicity of subscribers in a multicast subscription system, the method comprising:

disturbing the flow of data between said sender and said subscribers.

25 21. A method according to claim 20 and wherein said disturbing comprises altering the sent and pending queues.

22. A method according to claim 20 and wherein said disturbing comprises placing a packet in said sent queue which was never transmitted.

30 23. A method according to claim 20 and wherein said disturbing comprises altering the packet sequence number.

24. A method according to claim 20 and wherein said disturbing comprises incrementing the sequence number relative to the sequence of packets that actually need to be sent.

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25. A method of sending packets to a multiplicity of subscribers in a multicast subscription system, the method comprising:

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having packets in a sent queue which were never in a pending queue.

26. A method of sending packets to a multiplicity of subscribers in a multicast subscription system, the method comprising:

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creating a NACK generation incident in order to determine if said sender has any attentive subscribers.

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27. A computer product readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for transmission of packets to a multiplicity of subscribers in a multicast subscription system, said method steps comprising:

monitoring the activity at a NACK server.

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28. A product according to claim 27 and wherein said monitoring includes determining whether or not there are attentive subscribers from the activity at said NACK server.

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29. A product according to claim 27 and also comprising disturbing the flow of data between said sender and said subscribers.

30. A product according to claim 29 and wherein said disturbing comprises altering the sent and pending queues.

5 31. A product according to claim 29 and wherein said disturbing comprises placing a packet in said sent queue which was never transmitted.

32. A product according to claim 29 and wherein said disturbing comprises altering the packet sequence number.

10 33. A product according to claim 29 and wherein said disturbing comprises incrementing the sequence number relative to the sequence of packets that actually need to be sent.

15 34. A computer product readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for transmission of packets to a multiplicity of subscribers in a multicast subscription system, said method steps comprising:

20       disturbing the flow of data between said sender and said subscribers.

25 35. A product according to claim 34 and wherein said disturbing comprises altering the sent and pending queues.

36. A product according to claim 34 and wherein said disturbing comprises placing a packet in said sent queue which was never transmitted.

30 37. A product according to claim 34 and wherein said disturbing comprises altering the packet sequence number.

38. A product according to claim 34 and wherein said disturbing comprises incrementing the sequence number relative to the sequence of packets that actually need to be sent.

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39. A computer product readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for transmission of packets to a multiplicity of subscribers in a multicast subscription system, said method steps comprising:

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having packets in a sent queue which were never in a pending queue.

40. A computer product readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for transmission of packets to a multiplicity of subscribers in a multicast subscription system, said method steps comprising:

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creating a NACK generation incident in order to determine if said sender has any attentive subscribers.

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